AMENDMENTS TO CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for processing ~~compressed, noisy~~ digital images, comprising the steps of:

(a) processing initial first color data of an image to obtain reconstructed first color data thereof by

(a)(1) computing a transform representation of the initial first color data for each of a plurality of blocks of the image, each computed transform representation comprising a plurality of transform coefficients,

(a)(2) thresholding and scaling the transform coefficients in each block, and

(a)(3) inverting the thresholded and scaled transform coefficients in each block to determine a reconstructed first color value for a designated pixel in each block;

(b) determining spatially local maps between at least a portion of the initial first color data and at least corresponding portions of each of initial second and third color data of the image; and

(c) estimating reconstructed second and third color values for the designated pixel in each block from selected reconstructed first color values obtained in step (a) using the maps determined in step (b) to obtain the reconstructed second and third color data of the image.

2. (Original) The method of claim 1, wherein each of the plurality of blocks encompasses a neighborhood of pixels, each block having a respective designated pixel for which the reconstructed first color value is determined.

3. (Currently Amended) The method of claim 2, wherein processing step (a) is performed until ~~a~~ the reconstructed first color value has been determined for each pixel in a particular neighborhood before proceeding to steps (b) and (c) in which the reconstructed second and third color values are estimated for the corresponding designated pixel from the reconstructed first color values in that neighborhood.

4. (Original) The method of claim 1, wherein the first color data is green color data, the second color data is red color data, and the third color data is blue color data.

5. (Original) The method of claim 4, further comprising the step of performing a hue shift on the reconstructed green, red and blue color data.

6. (Original) The method of claim 1, further comprising the step of interpolating the reconstructed image data to a different resolution.

7. (Original) The method of claim 1, wherein the thresholding in step (a)(2) is soft-thresholding.

8. (Currently Amended) An apparatus for processing ~~compressed, noisy~~ digital images, the apparatus comprising:

a transform domain processing module configured to process initial first color data of an image, the transform domain processing module including

a transform block processor configured to compute a transform representation of the initial first color data for each of a plurality of blocks of the image, each computed transform representation comprising a plurality of transform coefficients, and

a transform coefficient processor configured to threshold and scale the transform coefficients in each block, and to invert the thresholded and scaled transform coefficients in each block,

whereby the transform domain processing module determines a reconstructed first color value for a designated pixel in each block; and

a reconstruct module configured to (i) determine spatially local maps between at least a portion of the initial first color data and at least corresponding portions of each of initial second and third color data of the image and (ii) estimate reconstructed second and third color values for the designated pixel in each block from selected reconstructed first color values using the determined maps to obtain reconstructed second and third color data of the image.

9. (Original) The apparatus of claim 8, wherein each of the plurality of blocks processed by the transform domain processing module encompasses a neighborhood of pixels, each block having a respective designated pixel for which the reconstructed first color value is determined.

10. (Currently Amended) The apparatus of claim 9, wherein the reconstruct module estimates the reconstructed second and third color values for the corresponding designated pixel in a particular neighborhood from the reconstructed first color values in that neighborhood, after ~~a~~ the reconstructed first color value has been determined for each pixel in that neighborhood.

11. (Original) The apparatus of claim 8, wherein the first color data is green color data, the second color data is red color data, and the third color data is blue color data, and the apparatus further comprises a hue shift module configured to perform a hue shift on the reconstructed green, red and blue color data.

12. (Original) The apparatus of claim 8, further comprising an interpolation module configured to interpolate the reconstructed image data to a different resolution.

13. (Original) The apparatus of claim 8, wherein the apparatus comprises a computer or printer.

14. (Currently Amended) A ~~machine~~computer-readable medium ~~having a program of~~ encoded with computer-readable instructions for ~~directing~~ causing a ~~machine~~ computer to process ~~compressed, noisy~~ digital images, the program of instructions comprising:

(a) instructions for processing initial first color data of an image to obtain reconstructed first color data thereof by

(a)(1) computing a transform representation of the initial first color data for each of a plurality of blocks of the image, each computed transform representation comprising a plurality of transform coefficients,

(a)(2) thresholding and scaling the transform coefficients in each block, and

(a)(3) inverting the thresholded and scaled transform coefficients in each block to determine a reconstructed first color value for a designated pixel in each block;

(b) instructions for determining spatially local maps between at least a portion of the initial first color data and at least corresponding portions of each of initial second and third color data of the image; and

(c) instructions for estimating reconstructed second and third color values for the designated pixel in each block from selected reconstructed first color values obtained in step (a) using the maps determined in step (b) to obtain reconstructed second and third color data of the image.

15. (Currently Amended) The ~~machine~~ computer-readable medium of claim 14, wherein each of the plurality of blocks encompasses a neighborhood of pixels, each block having a respective designated pixel for which the reconstructed first color value is determined.

16. (Currently Amended) The ~~machine~~ computer -readable medium of claim 15, wherein processing instructions (a) are performed until ~~a~~ the reconstructed first color value has been determined for each pixel in a particular neighborhood before proceeding to instructions (b) and (c) which direct that the reconstructed second and third color values be estimated for the corresponding designated pixel from the reconstructed first color values in that neighborhood.

17. (Currently Amended) The ~~machine~~ computer-readable medium of claim 14, wherein the first color data is green color data, the second color data is red color data, and the third color data is blue color data.

18. (Currently Amended) The ~~machine~~ computer-readable medium of claim 17, further comprising instructions for performing a hue shift on the reconstructed green, red and blue color data.

19. (Currently Amended) The ~~machine~~ computer-readable medium of claim 14, further comprising the step of interpolating the reconstructed image data to a different resolution.

20. (Currently Amended) The ~~machine~~ computer-readable medium of claim 14, wherein the thresholding in (a)(2) is soft-thresholding.